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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/604,174	06/27/2000	John L. Manfredelli	MSFT-0188/154574	4724

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EXAMINER

BROWN, CHRISTOPHER J

ART UNIT PAPER NUMBER

2134

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/604,174	Applicant(s) MANFERDELLI ET AL.	
	Examiner Christopher J. Brown	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments, with respect to the 112 rejection regarding application of a key without key access have been fully considered and are persuasive. The 112 rejections has been withdrawn.

Applicant's arguments, with respect to the 112 rejection regarding indefiniteness of the term "relates" have been fully considered and are persuasive. The 112 rejection has been withdrawn.

Applicant's argument with respect to the 101 patentable utility rejection have been fully considered but are not persuasive.

Applicant's arguments with respect to claims 1-73 have been considered but are moot in view of the new ground(s) of rejection.

Information Disclosure Statement

The information disclosure statement filed 11/24/2000 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the

information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

The IDS filed 11/24/2000 is missing the attached 1449 form.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Claim 6 recites the limitation "the retrieval " in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention is directed to non-statutory subject matter with regards to creating a computer program. Claims 1-70 are rejected.

In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se. Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

See MPEP 2106

Claims 1-70 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility.

As per claims 1-73, These claims identify a set of actions but do not result in a concrete result.

For such subject matter to be statutory, the claimed process must be limited to a practical application of the abstract idea or mathematical algorithm in the technological arts. See

Alappat, 33 F.3d at 1543, 31 USPQ2d at 1556-57 (quoting *Diamond v. Diehr*, 450 U.S. at 192, 209 USPQ at 10). See also Alappat 33 F.3d at 1569, 31 USPQ2d at 1578-79 (Newman, J., concurring) ("unpatentability of the principle does not defeat patentability of its practical applications") (citing *O'Reilly v. Morse*, 56 U.S. (15 How.) at 114-19). A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. See *AT &T*, 172 F.3d at 1358, 50 USPQ2d at 1452. Likewise, a machine claim is statutory when the machine, as claimed, produces a concrete, tangible and useful result (as in *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601) and/or when a specific machine is being claimed (as in Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557 (in banc)). For example, a computer process that simply calculates a mathematical algorithm that models noise is nonstatutory.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act

of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 1 14, 15, 16, and 21, are rejected under 35 U.S.C. 102(e) as being anticipated by Mishenko US 6,301,361

As per claims 1, 15, 16 and 21 Mischenko teaches a program applying a cryptographic algorithm to encrypt apply a key to a first data without access to the cryptographic key, (Abstract) It is inherent that the program is compiled.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 14, 15, 16, and 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishenko US 6,301,361 in view of Graunke US 5,991,399,

As per claims 2, and 3 Mishenko does not teach public key algorithms...

Gaunke teaches use of a public key algorithm (Col 3 lines 6-20).

It would have been obvious to one of ordinary skill in the art to use public key algorithms because they are widely used and known to be secure.

Claims 4, 5, 6, 17-20, 24, 49, 58-61 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishenko US 6,301,361 Graunke US 5,991,399, in view of Maytal US 6,715,079.

As per claims 4, 5, 6, 24, 49, and 65, the Mishenko-Graunke combination teaches a program, Mishenko-Graunke does not teach that the program is based on data that identifies the CPU.

Maytal teaches receiving a program with data customizing the program so that it only works on the Computer with the correct CPUID, (Col 10 lines 16-53 Fig 12).

It would have been obvious to one of ordinary skill in the art to modify the program of Mishenko-Graunke with the data of Maytal because the customized program will prevent illegal copying and use without the appropriate CPUID.

As per claims 17-20 and 58-61, Mishenko-Graunke does not disclose downloading a program over the Internet.

Maytal teaches CPU's submitting data to request a customized computer program may be downloaded to the computer over the Internet, (Col 10 lines 25-35). It would have been obvious to one of ordinary skill in the art to modify the program of Mishenko-Graunke with the delivery of Maytal because distribution over the Internet is cheaper and faster than other delivery methods.

Claims 7-10, 22, 23 and 30-34, 36, 37, 43-48, 50, 51, 53, 56, 57 62, and 66-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishenko US 6,301,361 in view of Graunke US 5,991,399, in view of Aucsmith US 5,892,899.

As per claims 8-10, 23, and 68 Mischenko does not teach diversionary computer actions. Aucsmith teaches obfuscation subprograms that are diversionary in nature, (Col 6 lines 23-27). It would have been obvious to one of ordinary skill in the art to add the obfuscation subprograms the original program of Mischenko so that the original program is not easy to hack.

As per claim 7, 22, 30-34, 36, 37, and 43-48, 50, 51, 53, 56, 57, 62, 66, 67, 68 Mishenko-Graunke teaches a program applying a cryptographic public/private key pair. Mishenko-Graunke teaches using a public key to encrypt data and using a private key to decrypt data, (Col 3 lines 6-20). It is inherent that the program is compiled.

Mishenko-Graunke does not teach diversionary computer actions.

Aucsmith teaches obfuscation subprograms that are diversionary in nature, (Col 6 lines 23-27). It would have been obvious to one of ordinary skill in the art to add the obfuscation subprograms the original program of Graunke so that the original program is not easy to hack.

Claims 12, 13, 28, 29, 35, 41, 42, 54, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishenko US 6,301,361 in view of Graunke US 5,991,399, in view of Glass US 6,553,494

As per claims 12, 13, 28, 29, 35, 41, 42, 54, and 64 Mishenko-Graunke does not teach hashing.

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Glass teaches obtaining a first hash, including it and creating a second hash to validate that the document has not been altered, (Col 2 lines 20-27).

It would have been obvious for one of ordinary skill in the art to add hashing to the system of Graunke so that security is increased.

Claims 11, 25, 38, 52, 63 and 71-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishenko US 6,301,361 in view of Graunke US 5,991,399, in view of Barton US 5,912,972

As per claims 11, 25, 38, 52, and 71-73 the prior Mishenko-Graunke combination does not teach error detection.

Barton teaches error detection and correction, (Col 9 lines 9-16).

It would have been obvious to one of ordinary skill in the art to add the error correction to the system of Mishenko-Graunke because the error correction would maintain the authenticity of any data it was used with.

As per claim 63, Mishenko-Graunke teaches a program applying a cryptographic public/private key algorithm. Mishenko-Graunke teaches using a public key to encrypt data and using a private key to decrypt data, (Col 3 lines 6-20). It is inherent that the program is compiled.

Barton teaches error detection and correction, (Col 9 lines 9-16).

It would have been obvious to one of ordinary skill in the art to add the error correction to the system of Mishenko-Graunke because the error correction would prevent degradation of the code to the point of being unuseable.

Claims 26, 27, 39, 40, 55, 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishenko US 6,301,361 in view of Graunke US 5,991,399, in view of Aucsmith US 5,892,899 in view of Johnson US 5,682,428

As per claims 26, 27, 39, 40, 55, and 70 The prior Mishenko-Graunke-Aucsmith combination does not teach decrypting a program using it and then reencrypting it. Johnson teaches decrypting a file, manipulating it and then reencrypting it, (Col 27 lines 32-37). It would have been obvious to one of ordinary skill in the art to add the encryption of Johnson to the Mishenko-Graunke-Aucsmith combination to increase security.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher J. Brown whose telephone number is (571)272-3833. The examiner can normally be reached on 8:30-6:00.

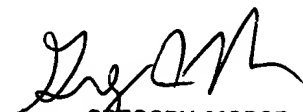
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571)272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Brown

4/17/05

A handwritten signature in black ink, appearing to be 'CGB'.A handwritten signature in black ink, appearing to be 'Gregory Morse'.

GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100